

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

NORTH ATLANTIC OCEAN

By F. A. YOUNG

The weather over the North Atlantic during October was characterized by long periods of cyclonic activity on the steamer lanes, and also, to a lesser extent, in southern waters. Table 1 shows a large minus pressure departure at Horta, and on only two days during the month was the barometer reading at that station equal to or above the normal, while from the 3d to the 10th the readings ranged between 29.34 and 29.92 inches. On the other hand an area of high pressure was in the vicinity of the Bermudas from the 1st to 8th and the shifting of the North Atlantic high so far to the westward of its normal position was no doubt responsible in part for the freakish weather experienced over a large portion of the ocean.

During certain periods of the month low pressure prevailed over an extensive territory, while the storm areas were comparatively restricted. One shipmaster commented on the fact that while he recorded low-barometer readings for several successive days, only moderate winds were encountered during the period.

Judging from reports received the number of days with fog was not far from the normal over the greater part of the ocean, although slightly above over the eastern section of the steamer lanes and off the European coast.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m. (75th meridian time), North Atlantic Ocean, October, 1927

Stations	Average pressure	Departure ¹	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Belle Isle, Newfoundland.....	29.82	-0.05	30.36	13th ²	28.82	22d.
Halifax.....	30.00	-0.05	30.46	12th.....	29.00	21st.
Nantucket.....	29.97	-0.05	30.40	31st.....	29.14	20th.
Hatteras.....	30.01	-0.02	30.30	6th.....	29.52	19th. ³
Key West.....	29.92	-0.06	30.04	23d.....	29.74	17th.
New Orleans.....	30.03	-0.02	30.22	14th.....	29.84	12th.
Cape Gracias.....	29.81	-0.09	29.90	23d ²	29.66	17th.
Turks Island.....	29.96	-0.01	30.06	23d.....	29.80	17th.
Bermuda.....	30.06	-0.04	30.32	2d.....	29.64	19th.
Horta, Azores.....	29.87	-0.25	30.18	1st.....	29.34	6th.
Lerwick, Shetland Islands.....	29.81	-0.02	30.47	8th ²	29.00	27th.
Valencia, Ireland.....	29.97	-0.06	30.47	12th.....	28.94	28th.
London.....	30.05	-0.14	30.48	5th.....	29.09	29th.

¹ From normals shown on H. O. Pilot Chart based on observations at Greenwich mean noon, or 7 a. m., 75th meridian time.

² Mean of 28 observations.

³ And on other dates.

On the 1st three distinct areas of low pressure were over the northern section of the ocean; the first central near Belle Isle, the second near 50° N., 27° W., and the third over the Shetland Islands. On the 2d the western low was central near 52° N., 43° W., and the other two had evidently combined over the British Isles, where moderate to strong gales were reported at a number of land stations.

On the 2d a shallow depression was off the south coast of Florida. This moved northward, deepening gradually, and on the 4th the center was near Father Point. On the latter date Nantucket reported a southwest gale, force 10.

From the 4th until the 7th the region of the Azores was covered by an area of low pressure that reached its maximum intensity on the 6th, on which date, as well as the 7th, moderate to full gales were reported in the southwest quadrant. On the 8th the center of the

low was near 45° N., 23° W., from which position it moved but slightly during the following three days, gradually filling in.

From the 12th to the 20th the Caribbean Sea was covered by a depression which reached its greatest intensity on the 17th when a barometer reading of 29.54 inches was recorded near the center, then lying between Jamaica and the Central American coast. At times the storm area extended into the Gulf of Mexico but ultimately appeared to move in a northeasterly direction as a poorly defined depression which dissipated after passing the Greater Antilles.

On the 13th a severe disturbance, although of limited extent, was central off the American coast near New York. Southerly gales prevailed from Hatteras to Portland, Me., and the storm area extended eastward to the 65th meridian. On the same day an area of high pressure had its crest near Cape Race, Newfoundland, where a barometer reading of 30.58 inches was recorded, and on the 13th and 14th northerly gales, accompanied by comparatively high pressure, occurred.

While the Caribbean depression was yet in existence, a disturbance formed off the southern Atlantic coast of the United States and moved northward, being central on the southern New England coast on the morning of the 19th as a storm of considerable intensity. Nantucket reported a pressure of 29.20 inches and fresh to strong gales prevailed between Cape Hatteras and Nova Scotia.

Prior to this time, on the 15th and 16th, a low of limited extent was central about 10° west of the Azores, and on the latter date a southeasterly wind of force 11 was reported in the northeast quadrant.

On the 24th and 25th a well-defined low was over the middle section of the steamer lanes, attended by moderate westerly gales in the southern quadrants.

On the 27th a well-defined and severe disturbance was central near the Azores. On the following day the disturbance had moved to a position off southwest Ireland and deepened, Valencia reporting a barometer reading of 28.94 inches. By the morning of the 29th the center had reached the Norwegian coast, with strong winds and gales blowing over northwestern Europe. According to press dispatches this storm off the coast of Ireland was one of the most disastrous in years. The loss of life and property was very great, especially among the fishing fleets. Condition on the 28th are shown on Chart VIII. Conditions on the 29th to 31st are shown on Charts IX to XI. On the last-named date a storm area of wide extent covered the ocean.

NOTES.—American S. S. *President Garfield*, Capt. G. Cullen. Observer, E. A. Cooper. From Marseille to Boston.

Blow accompanied by rising barometer, until reaching its peak of 30.46 inches on October 14, in 42° 43' N., 44° 54' W., at 8 a. m., with a wind of NW. 6, after swinging from NW., 5-6, into N., 6 and back to NW., 6, finally blowing itself out.

American S. S. *Clontarf*, Capt. M. S. Laciard. Observer, Gilbert B. Wagner. From New York to Alexandria, Egypt.

October 14, during rain squall, waterspout observed. Approximate position, 34° 10' N., 19° 14' E.

October 15, during rain squall, waterspout observed in 31° 30' N., 29° 13' E.